

What is claimed is:

1. An apparatus for font generation comprising:
  - a basic font storage section storing a font character
  - 5 of a basic font for generating a font character;
  - a feature parameter storage section storing a feature parameter expressing a feature of the font character;
  - a genetic algorithm processing section configured to generate plural new feature parameters by performing genetic
  - 10 algorithm processing on the feature parameter;
  - a font generation section configured to generate new font characters by deforming the font character of the basic font based on the plural feature parameters generated in the genetic algorithm processing section; and
  - 15 a display unit displaying the new font characters generated in the font generation section; wherein
  - the genetic algorithm processing section determines the feature parameter according to the preferences of a user based on a font character selected by the user from among the new
  - 20 font characters displayed on the display unit,
  - the font generation section creates a font based on the feature parameter according to the preferences of the user determined by the genetic algorithm processing section.
- 25 2. The apparatus of claim 1, further comprising:

an input unit scanning a character handwritten by the user; and

a character features extraction section configured to recognize a character from character data scanned by the input unit, to compare the recognized character and the font character of the basic font, and to extract a feature of the handwritten character as the feature parameter.

3. The apparatus of claim 1, wherein  
10 the genetic algorithm processing section generates plural new feature parameters by performing genetic algorithm processing including crossover and mutation on two of the feature parameters selected from the feature parameter.

15 4. The apparatus of claim 2, wherein  
the genetic algorithm processing section generates plural new feature parameters by performing genetic algorithm processing including crossover and mutation on two of the feature parameters selected from the feature parameter.

20 5. The apparatus of claim 1, wherein  
the feature parameter includes at least one of the features of radicals of the font character of the length of stroke, the roundness of stroke, the undulation of stroke,  
25 the angle of stroke, the weight of stroke, the corner, and

the deformation of outside shape of font character.

6. The apparatus of claim 2, wherein  
the feature parameter includes at least one of the  
5 features of radicals of the font character of the length of  
stroke, the roundness of stroke, the undulation of stroke,  
the angle of stroke, the weight of stroke, the corner, and  
the deformation of outside shape of font character.

10 7. A computer readable storage medium recording a  
program for font generation, the program executing in a font  
generation apparatus, the program comprising:

generating plural new feature parameters by performing  
geneticalgorithmprocessingonafeatureparameterexpressing  
15 the feature of a font character;

generating new font characters by deforming a font  
character of a basic font for generating a font character  
based on the plural generated feature parameters;

20 displayingtheneewgeneratedfontcharactersonadisplay  
unit;

determining the feature parameter according to the  
preferences of a user based on a font character selected by  
the user from among the new font characters displayed on the  
display unit; and

25 creatingafontbasedonthedeterminedfeatureparameter

according to the preferences of the user.

8. The computer readable storage medium of claim 7,  
wherein the program further comprising:

5 scanning a character handwritten by the user with an  
input unit; and

recognizing a character from character data scanned by  
the input unit;

comparing the recognized character and the font  
10 character of the basic font, and extracting a feature of the  
handwritten character as a feature parameter.

9. The computer readable storage medium of claim 7,  
wherein

15 the genetic algorithm processing includes generating  
plural new feature parameters by performing genetic algorithm  
processing including crossover and mutation on two of the  
feature parameters selected from the feature parameter.

20 10. The computer readable storage medium of claim 8,  
wherein

the genetic algorithm processing includes generating  
plural new feature parameters by performing genetic algorithm  
processing including crossover and mutation on two of the  
25 feature parameters selected from the feature parameter.

11. The computer readable storage medium of claim 7,  
wherein

the feature parameter includes at least one of the  
5 features of radicals of the font character of the length of  
stroke, the roundness of stroke, the undulation of stroke,  
the angle of stroke, the weight of stroke, the corner, and  
the deformation of outside shape of font character.

10 12. The computer readable storage medium of claim 8,  
wherein

the feature parameter includes at least one of the  
features of radicals of the font character of the length of  
stroke, the roundness of stroke, the undulation of stroke,  
15 the angle of stroke, the weight of stroke, the corner, and  
the deformation of outside shape of font character.

13. A method for font generation in an apparatus for  
font generation, the method comprising:

20 generating plural new feature parameters by performing  
geneticalgorithmprocessingonafeatureparameterexpressing  
the feature of a font character;

generating new font characters by deforming a font  
character of a basic font for generating a font character  
25 based on the plural generated feature parameters;

displaying the new generated font characters on a display unit;

determining the feature parameter according to the preferences of a user based on a font character selected by the user from among the new font characters displayed on the display unit; and

creating a font based on the determined feature parameter according to the preferences of the user.

10           14.    The method of claim 13, further comprising:  
              scanning a character handwritten by the user with an input unit; and  
              recognizing a character from character data scanned by the input unit;  
15            comparing the recognized character and the font character of the basic font, and extracting a feature of the handwritten character as a feature parameter.

              15.    The method of claim 13, wherein  
20            the genetic algorithm processing includes generating plural new feature parameters by performing genetic algorithm processing including crossover and mutation on two of the feature parameters selected from the feature parameter.

25           16.    The method of claim 14, wherein

the genetic algorithm processing includes generating plural new feature parameters by performing genetic algorithm processing including crossover and mutation on two of the feature parameters selected from the feature parameter.

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17. The method of claim 13, wherein

the feature parameter includes at least one of the features of radicals of the font character of the length of stroke, the roundness of stroke, the undulation of stroke,  
10 the angle of stroke, the weight of stroke, the corner, and the deformation of outside shape of font character.

18. The method of claim 14, wherein

the feature parameter includes at least one of the  
15 features of radicals of the font character of the length of stroke, the roundness of stroke, the undulation of stroke, the angle of stroke, the weight of stroke, the corner, and the deformation of outside shape of font character.